

Applicants : Joseph S. Stam et al.
Appn. No. : 10/615,317
Page : 2

Listing of Claims:

Claims 1 – 25 cancelled without prejudice

26. (currently amended) A vehicular vision system, comprising:

an image sensor and a light source, said light source is configured to emit light rays in the non-visible spectrum to illuminate objects within a scene external to a controlled vehicle beyond an exterior surface of a windshield, wherein said light source is configured to operate in synchronous relationship with acquisition of images from said image sensor, the vision system being capable of distinguishing vehicular light source from non-vehicular light sources.

27. (original) A vehicular vision system as in claim 26 configured for use in an apparatus selected from the group comprising: rear vision, collision avoidance, obstacle detection, adaptive cruise control, rain sensing, exterior light control, and lane departure warning.

Claims 28 – 31 cancelled without prejudice

32. (original) A vehicular vision system as in claim 26 wherein said light source is a broadband emitter having a visible light ray blocking filter.

33. (original) A vehicular vision system as in claim 26 wherein said light source is a narrow band emitter.

34. (original) A vehicular vision system as in claim 33 wherein said light source comprising at least one light emitting diode.

35. (original) A vehicular vision system as in claim 34 wherein said light source emits light rays in the range from approximately 780nm to approximately 1100nm.

Applicants : Joseph S. Stam et al.
Appln. No. : 10/615,317
Page : 3

36. (original) A vehicular vision system as in claim 34 wherein said light source is pulsed with momentary energy levels that exceed a one hundred percent duty cycle level.

37. (original) A vehicular vision system as in claim 26 wherein said image sensor further comprising a narrow band pass spectral filter.

38. (original) A vehicular vision system as in claim 37 wherein said spectral filter is placed between said scene and said image sensor.

Claims 39 – 40 cancelled without prejudice

41. (original) A vehicular vision system as in claim 26 wherein said light source is a near infrared laser.

42. (original) A vehicular vision system as in claim 26 further comprising an AC ballast.

43. (original) A vehicular vision system as in claim 42 wherein said AC ballast is configured to synchronously strike an arc with high intensity when an image is acquired from said image sensor.

44. (original) A vehicular vision system as in claim 37 wherein said band pass spectral filter is selected from the group comprising: a movable shutter, a visible light absorbing LCD, an electrochromic filter and a suspended particle device.

45. (original) A vehicular vision system as in claim 26 configured for use in an apparatus selected from the group comprising: rear vision, collision avoidance, obstacle detection, adaptive cruise control, rain sensing, exterior light control, and lane departure warning.

46. (original) A vehicular vision system as in claim 26 further comprising a spectral filter located between said image sensor and the scene, wherein said spectral filter is

Applicants : Joseph S. Stam et al.
Appln. No. : 10/615,317
Page : 4

configured to substantially block light rays other than the predominant spectral band of light rays emitted by said light source.

Claims 47 – 60 cancelled without prejudice